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Some Recent Records of the Southeastern Shrew in Southern Illinois

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ABSTRACT. *Sorex longirostris* is locally more abundant and somewhat more widespread in southern Illinois than previous records indicated.

Under the auspices of the Illinois Nature Preserves Commission, a list of endangered, vulnerable and rare Illinois vertebrates is being prepared, with an interim treatment having been issued in May, 1976. Since the completed version will be based in part on the development and availability of new knowledge, I herewith offer information on one species included on the interim list, the southeastern shrew, *Sorex longirostris*.

Golley (1962) and Hamilton (1963) reviewed the main factors that have stimulated keen interest in this form : its oddly discontinuous distribution (Maryland south to Florida, westward through Alabama, Tennessee, western Kentucky and Indiana, and southern Illinois) , apparent low densities, obscure ecology, and unsettled taxonomic status. In discussing the Illinois population, which is said to be *Sorex l. longirostris*, Hoffmeister and Mohr (1957) pointed out that "less than a dozen specimens have been collected in the state," and that all this material had stemmed from Alexander, Coles, Fayette and Johnson counties. Pope and Union counties have since yielded a specimen each (Klimstra and Roseberry, 1969), and there may be specimens of which I am unaware. Those listed below were obtained in Jackson, Johnson and Union counties. Sunken cans secured **14**, domestic cats (*Felis catus*) **25**, and a single locality in Union County yielded **34** of the **39**. Not listed are eight recent *Sorex sp.* in my possession from Williamson County; they may be *longirostris* but demand more study.

Taken In Cans. Persons studying salamanders, and using can traps imbedded beside screen wire drift fences, furnished this series :

(a) McGuire's Orchard Farm, 6.5 mi S Carbondale, Jackson County. Two specimens (12 September 1966 ; unknown date, 1966-67 ; first records for the county) R. A. Brandon, and E. H. Albert (1967). Habitat : grassy field beside a water impoundment. The trap line of 49 cans and about 210 meters of wire was monitored intermittently (after rain-

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fall) from October, 1966, into May, 1967. The specimens were donated to the Department of Zoology, Southern Illinois University at Carbondale.

(b) Bird Spring Swamp, Johnson County. Two (22 December 1970 ; 12 February 1972) R. E. Williams (1971). Cypress wood beside temporary standing water. Forty cans, about 120 m wire ; monitored intermittently (after rainfall) October, 1969, into May, 1972. Specimens donated to Dept. Zool., SIU-C.

(c) George's Farm, 1.5 mi N Cobden, Union County. Ten (28 June, 3 July, 14 August, 1969; 27 February, 3 March, 19 April, 24 June, 9 August, 13 September, 1970 ; 13 June 1971) W. G. George, A. B. McPherson, and others. Moist edge of impounded water in a wood. Fifty cans, about 150 m wire ; line was installed during 19-25 June, 1969, and visited daily through 31 December 1971 (about 46,000 trap nights). The catch included, in addition to the *Sorex longirostris*, 183 short-tailed shrews (*Blarina brevicauda*) and 21 least shrews (*Cryptotis parva*). Two specimens in possession of A. B. McPherson, two donated to Mammal Collection, Dept. Zool., SIU-C ; two donated to a classroom collection, Dept. Zool., SIU-C ; two inadvertently discarded from freezer ; two in author's possession.

Taken By Cats. Pets free to roam outdoors caught this series.

(a) Home beside old state Highway 51, 1 mi N Cobden, Union County. One (31 March 1974). H. H. Snyder. Hunting grounds: lawn with large trees ; fields, banks of an impoundment. Specimen badly mutilated and decomposed ; thrown away.

(b) George's Farm (as given above). Twenty four (5 March, 17 June, 20 June, 21 June, 6 July, 1969 ; 11 April, 5 May, 1970 ; 22 May (2), 29 May, 27 June, 1971; 17 May, 25 May, 2 June, 1972 ; 23 March, 5 May, 26 May, 22 November, 1973 ; 4 June, 15 July, 1974; 21 March, 1975 ; 22 February 1976). Hunting grounds : lawn in a grove of old trees ; fields, apple orchard, a woodlot harboring a small impoundment (mentioned above). Seven specimens donated to Mammal Collection, Dept. Zool., SIU-C ; two escaped after capture ; 15 in author's possession.

A study that began at this locality in late 1967 uses cats which bring their captured prey into the house or onto the surrounding lawn (George, 1974). The captured specimens are logged either when brought in or subsequently when brought to light in the form of discarded carcasses and prey remains. The cats do not eat shrews. But a *Sorex longirostris* is very difficult to detect against a background of vegetation, especially of leaf litter on the lawn, and no doubt we have overlooked most of the specimens the cats have dropped outdoors. The actual number they have taken probably ranges between 48-60-----an estimate derived from the number of prey items logged in the same year when the "delivery area" was under continuous day-and-night scrutiny, compared to the number logged (during equivalent seasonal and hourly periods) when the area was continuously scrutinized for lesser amounts of time.

Of the 24 recorded specimens, 18 are thought and 15 are known to have been captured by an animal with a home range of less than 5 acres

(2.2 ha). Usually this animal haunts a trail which runs from the house, across the lawn, down into a little wood and then along the banks of the impoundment—a distance of about 225 m.

Additional Comments. Sunken cans tend to be relatively more efficient than baited traps in revealing the presence of "rare" shrews, as Brown (1964) showed for Soricidae in the Rocky Mountains, and Tucker (1964) for *S. longirostris* in Tennessee. Trapping for small mammals and relying chiefly on Museum Special traps in southern Illinois, Layne (1958), Klimstra (1969) and Krull and Bryant (1973) caught no *Sorex longirostris* in about 30,000 trap nights. My own use of Museum Special traps, and also of small mouse traps and several types of Sherman live traps, has been equally unproductive in spite of the placement of traps in habitats shown by sunken cans and cats to harbor *S. longirostris* in fair if not exceptional numbers. In any event, this shrew seems not to be a dwindling or a threatened form in Illinois, but one merely and characteristically difficult to catch in most kinds of traps. Even its rarity, I feel, is suspect.

I wish to thank the persons mentioned above for permission to list their specimens.

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